

Alcimededes

Ethanol-based hand sanitisers (EBHS) are used widely in health care facilities around the world. Infection control personnel advocate the use of generous quantities of these cleansers before and after contact with patients in order to reduce the risk of transmission of infection. Although it is assumed that little systemic absorption of ethanol occurs during use, many alcohols are absorbed to varying degrees via the transdermal route. As ethanol intoxication by employees in the medical workplace is a potentially serious finding, it is of forensic and medical-legal importance to establish whether frequent use of EBHS has a noticeable effect on serum blood ethanol levels. A study that involved 5 volunteers applying 5 ml of an EBHS to both hands and rubbing until dry on 50 occasions during a 4-hour period, found that there was no significant increase in their blood alcohol levels (*Am J Emerg Med* 2006; **24**: 815–7). So, it appears that hospital workers will not be able to offer exposure to EBHS in mitigation when accused of being drunk in charge of a motor vehicle.

In recent years there has been increasing media coverage about the important link between alcohol and drugs and sexual assault. A case controlled study that compared 93 complainants of alcohol or drug implicated rape (ADIR) with 91 cases of non-alcohol or drug implicated rape (NADIR) has highlighted important differences between the two groups (*Med Sci Law* 2006; **46**: 219–28). The results identify differences in: location of assault (NADIR more likely to occur in private homes); victim/offender relationship (NADIR more likely between partners; stranger and acquaintance rape more common in ADIR); marital status (victims of NADIR more likely to be married); and offender characteristics (NADIR offenders more likely to have come to police attention prior to the offence). A consistent finding from the research is that the victim's state of sobriety or intoxication is more important than that of the offender.

Clothing ignition burn injuries are relatively common in developing countries, where open fires are used widely for cooking and warmth. By contrast, the incidence of clothing ignition injury has been steadily decreasing in the United Kingdom since the 1960s as a result of the introduction of central heating in favour of open fire or coal fire heating. However, doctors at a burns unit in Liverpool have noted a significant number of women presenting with gypsy skirt burns, and describe six cases to highlight the unique distribution of the wounds (confined to the buttocks and thigh and limited to the level of the skirt garter) and the circumstances in which the accidents occurred (*Injury* 2007; **38**: 122–4). The 'gypsy skirt' is typically long, flowing and made of several layers of sheer lightweight material such as cotton or nylon.

It appears that it is the long, loose fitting design of the garment and the more readily inflammable nature of the lightweight materials used that makes the gypsy skirt particularly prone to ignition.

Female autoerotic deaths are less common than male ones and usually present in less obvious ways. One such case that was initially unrecognised by the investigative team involved a 34-year old woman found dead in her apartment (*Med Sci Law* 2006; **46**: 357–9). The woman was discovered lying on the floor of her apartment with her jeans unzipped and her sweater lifted over her head, exposing her breasts. A dog leash was loosely wound round her neck and she had a number of foreign bodies inserted into her body orifices. A toothbrush had been inserted into her rectum and vaginal examination revealed the presence of a syringe, a small crumpled bag and three syringe caps. The actual cause of death was cocaine intoxication rather than the more common asphyxia. The case serves to remind us that victims of female autoerotic deaths do not usually rely on pornographic pictures and literature, complex bindings, cross-dressing and accessory props, as do their male counterparts. If accessories are used, they are typically foreign bodies inserted into the vagina or rectum.

Forensic physicians involved in sexual assault examinations need to have an understanding of the wide variation in normal anatomical appearance of genitalia and how cultural beliefs and practices may affect such appearances. Amongst South-East Asian males, for example, one sexual practice involves the insertion of firm spherical, bead-like, foreign objects into the subcutaneous tissue of the shaft of the penis proximal to the glans. Allegedly this enhances the sexual pleasure of females during sexual intercourse. A report describes four cases of these so-called penile nodules and provides a brief historical account of the practice, which can apparently be traced back to the 14th century (*Med Sci Law* 2006; **46**: 349–56).

New guidelines for post-exposure prophylaxis after sexual exposure to HIV have been published recently (*Int J STD AIDS* 2006; **17**: 81–92). Aimed primarily at clinicians and policy makers in sexual health, primary and emergency care within the United Kingdom, these guidelines should be essential reading for all those involved in the examination and care of complainants of sexual assault. They include useful tools for calculating the risk that an individual will acquire HIV following sexual exposure and it seems likely that tools such as this will be used by voluntary sector agencies when providing information for individuals who have been sexually assaulted.